

AMENDMENTS TO THE CLAIMS

Applicants hereby present the claims, their status in the application, and amendments thereto as indicated:

1. (Canceled)
2. (Currently Amended) An image sensor comprising a number of light sensor circuits arranged to form a matrix of pixels, each of said circuits being capable of producing in a photoelectric converting element a sensor current proportional to the quantity of light falling thereon and converting the produced current into a voltage signal by using a MOS type transistor with a logarithmic output characteristic in a weak inverse state, and a voltage switching-over circuit for changing a drain voltage of each of said MOS type transistors for each of said pixels to a value lower than a normal value for a specified time to remove a charge accumulated in a parasitic capacitance of the photoelectric element to thereby initialize the sensor circuit, before detecting a light signal from each pixel wherein detection of a light signal from each sensor circuit is conducted at a specified moment of time after initialization of the sensor circuit.
3. (Currently Amended) An image sensor comprising a number of light sensor circuits arranged to form a matrix of pixels, each of said circuits being capable of producing in a photoelectric converting element a sensor current proportional to the quantity of light falling thereon and converting the current into a voltage signal by a MOS type transistor with a logarithmic output characteristic in a weak inverse state, a pixel-line selecting circuit for successively selecting pixel lines, a pixel selecting circuit for successively selecting pixels in one selected line, both of said selecting circuits cooperating together to successively scan and read sensor signals from respective pixels in a time series, and a voltage switching-over circuit for changing a drain voltage of each of said MOS type transistors for respective pixels in a selectable pixel line to a value lower than a normal value for a specified time to remove a charge accumulated in a parasitic capacitance of the photoelectric element before sequentially selecting individual pixels on each of the pixel lines, wherein for each pixel line, initialization of all

the respective sensor circuits is conducted simultaneously during a pause state of the respective pixel line selecting circuit in which the respective pixel line selecting signal is at a low level.

4. (Previously Presented) An image sensor as defined in claim 2 or 3, characterized in that each of the light sensor circuits is composed of said MOS type transistor for converting a sensor current flowing in a photoelectric converting element to a voltage signal by using its logarithmic output characteristic in a weak inverse state, a second transistor for amplifying the voltage signal converted by said MOS type transistor and a third transistor for outputting a sensor signal corresponding to the voltage signal amplified by said second transistor for amplifying the voltage signal at a specified moment of time.
5. (Original) An image sensor as defined in claim 3, characterized in that a sample-and-hold circuit is provided on an output side of each pixel in each pixel line.